State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-176-22 Relating to Exemptions Under Section 27156 Of the Vehicle Code

Dinan Engineering, Inc. High Flow Throttle Body

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED; That the installation of the High Flow Throttle Body, manufactured and marketed by Dinan Engineering, Inc., 865 Jarvis Drive, Morgan Hill, CA 95037, has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for installation on 2000 through 2002 model year BMW vehicles as described in Exhibit A.

The High Flow Throttle Body consists of a tube (either aluminum or carbon fiber) which connects the vehicle's air flow meter to an open element type air filter located in a protected compartment. This system replaces the original intake and air filter system and allows more air into the engine under high throttle opening and engine rpm conditions.

This Executive Order is valid provided that the installation instructions for the High Flow Throttle Body will not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

This Executive Order shall not apply to any High Flow Throttle Body advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with the transfer to an ultimate purchaser.

Changes made to the design or operating conditions of the High Flow Throttle Body, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the High Flow Throttle Body using any identification other than that shown in this Executive Order or marketing of the High Flow Throttle Body for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the system shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

This Executive Order does not constitute any opinion as to the effect the use of the High Flow Throttle Body may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on the following emissions test data from two 2002 model year BMW vehicles which were equipped with Dinan's High Flow Throttle Body, Performance Software and High Flow Cold Air Intake. The test vehicles were a 530i certified to the Ultra Low Emission Vehicle standards and a 325i certified to the Low Emission Vehicle standards and subject to the Supplemental Federal Test Procedure test requirements. The test results, in grams per mile with the deterioration factors applied, showed that vehicle emissions did not exceed the exhaust emission standards.

2002 BMW 530i	TEST	NMOG	СО	NOx	НСНО
	Standard	0.040	1.7	0.2	0.008
	Modified	0.022	1.1	0.1	0.0003

2002 BMW 325i	SFTP (US06) (grams/mile)	NMHC+NOx	со	
	Standard	0.14	8.0	
	Modified	0.05	3.4	

Similar effect on vehicle emissions is expected with the installation of the High Flow Throttle Body on vehicles listed in this Executive Order.

This Executive Order is also based on the On-Board Diagnostic II (OBDII) testing conducted on the same test vehicles. Test data showed that these components, including the High Flow Throttle Body, when installed on the vehicles did not affect the vehicle's ability to perform its OBDII monitoring.

In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF DINAN ENGINEERING'S HIGH FLOW THROTTLE BODY.

No claim of any kind, such as "Approved by the Air Resources Board", may be made with respect to the action taken herein in any advertising of other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten-day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination is made, after the hearing, that grounds for revocation exist.

Executed at El Monte, California, this 24th day of March 2003.

Allen Lyons, Chief

Mobile Source Operations Division

Dinan Engineering Performance Software D-176-22 Exhibit A

<u>Model</u>	Model Years	Engine Size	Part Number
325i, 325ci 325xi	2001-2002	2.5L	D760-3250
330i, 330ci 330xi	2001-2002	3.0L	D760-3300
M3	2001-2002	3.2L	D760-3400
Z3 2.5i	2001-2002	2.5L	D760-3250
Z3 3.0i	2001-2002	3.0L	D760-3300
M Roadster	2001-2002	3.2L	D760-3400
M Coupe	2001-2002	3.2L	D760-3400
540i	1999-2002	4.4L	D760-3440
525i	2001-2002	2.5L	D760-3250
530i	2001-2002	3.0L	D760-3300
M5	2000-2002	5.0L	D760-5020
740i, 740iL	1999-2002	4.4L	D760-3440
X5 4.4i	2000-2002	4.4L	D760-3440
X5 3.0i	2001-2002	3.0L	D760-3300
X5 4.6i	2002	4.6L	D760-3440
Z8	2000-2002	5.0L	D760-5020